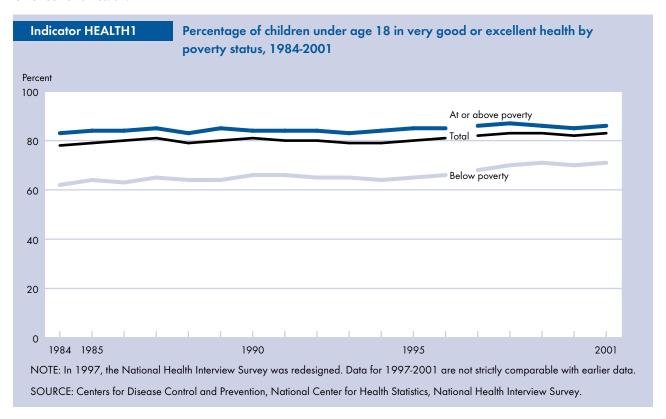


#### **General Health Status**

he health of children and youth is fundamental to their well-being and development. Parental reports of their children's health provide one indication of the overall health status of the Nation's children. This indicator measures the percentage of children whose parents report them to be in very good or excellent health.

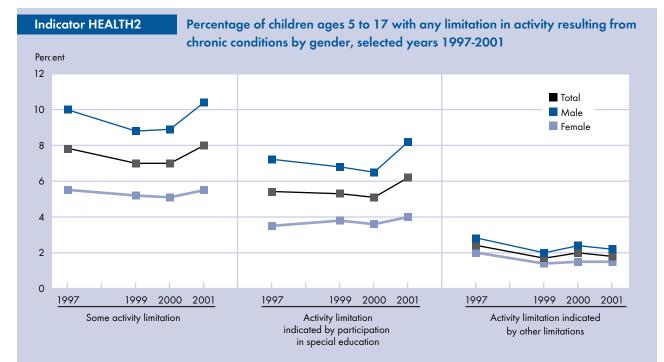


- In 2001, about 83 percent of children were reported by their parents to be in very good or excellent health.
- Children under age 5 are slightly more likely to be in very good or excellent health than are children ages 5 to 17 (85 and 82 percent, respectively).
- White, non-Hispanic children were more likely than Black, non-Hispanic and Hispanic children to be in very good or excellent health. In 2001, 87 percent of White, non-Hispanic children were reported to be in very good or excellent health, compared with 74 percent of Black, non-Hispanic children and 77 percent of Hispanic children.
- Child health varies by family income. Children living below the poverty line are less likely than children in higher-income families to be in very good or excellent health. In 2001, about 71 percent of children in families below the poverty line were in very good or excellent health, compared with 86 percent of children in families living at or above the poverty line.
- Each year, children at or above the poverty line were substantially more likely to be in very good or excellent health than were children whose families were below the poverty line. However, the health gap between children below and those at or above the poverty line decreased slightly between 1984 and 2001.

Bullets contain references to data that can be found in Table HEALTH1 on page 98. See indicator ECON1.A and ECON1.B on pages 16-17 for a description of child poverty.

## **Activity Limitation**

imitation of activity refers to a reduction in an individual's usual age-appropriate activities that results from a physical, mental, or emotional problem. "Age-appropriate" refers to the activities in which the individual would normally engage in at his/her age, such as school for children 5 to 17 years of age. In children, activity limitation is a broad measure of health and functioning in areas such as understanding or accomplishing routine schoolwork, eating, bathing, dressing, playing, and walking. Chronic health conditions that limit children's activities include, but are not restricted to: hearing, visual, and speech problems; learning disabilities; mental retardation and other developmental problems (such as cerebral palsy); mental and emotional problems; and a variety of chronic health problems (such as asthma). The long-term impact of activity limitation in children can often be ameliorated by use of health care and educational services. 60,61



NOTE: Data are available for 1997, 1999, 2000, and 2001. Children are identified as having activity limitations by asking parents whether children (1) are limited in their ability to walk, to care for themselves, or to participate in any other activities, and whether they (2) receive special education services. Positive responses to either indicate some activity limitation. Children with activity limitations are categorized as children with activity limitation indicated by participation solely in special education and children with activity limitations indicated by other limitations, which includes some children who also receive special education services.

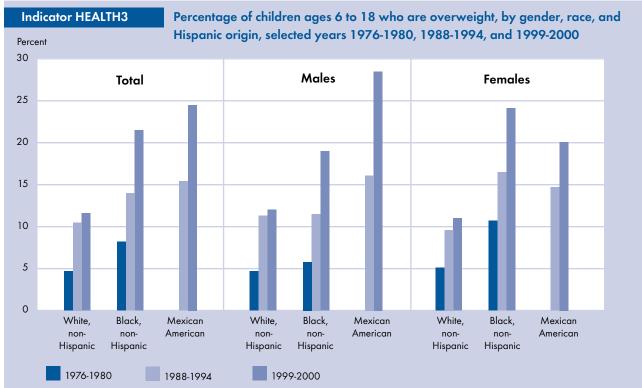
SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

- In 2001, approximately 8 percent of children ages 5 to 17 were reported to have limitations of activity due to chronic conditions. Six percent were identified as having activity limitations solely by their participation in special education. Two percent had limitations affecting their ability to walk, care for themselves, or participate in other activities.
- Activity limitations, particularly those requiring special education services, are reported more often for males than for females. The reasons for this gender difference is unclear, however; maturational, behavioral, social, and diagnostic explanations have been proposed.<sup>62</sup>
- Children in families of lower socioeconomic status (as measured by family income and parental education) have higher rates of activity limitations compared with children in higher socioeconomic status families. Among children ages 5 to 17, 12 percent of children living in families with incomes below the poverty line had activity limitations due to chronic conditions in 2001, compared with 8 percent of children living in families with incomes at or above the poverty line.

Bullets contain references to data that can be found in Table HEALTH2 on page 99. Endnotes begin on page 63.

### **Overweight**

verweight adolescents often become overweight adults, with an increased risk for a wide variety of poor health outcomes including diabetes, stroke, heart disease, arthritis and certain cancers. <sup>63,64</sup> The immediate consequences of overweight in childhood are often psychosocial but also include cardiovascular risk factors such as high blood pressure, high cholesterol, and the precursors to diabetes. <sup>65</sup> The prevalence of overweight among U.S. children changed relatively little from the early 1960's through 1980; however, since 1980 it has increased sharply. <sup>66</sup> The reasons for the increase in children who are overweight are not entirely clear and little is known about the prevention and treatment of overweight on a population basis. Numerous factors (e.g. advances in technology and trends in eating out) have been suggested as causes; however, definitive data linking these factors to the recent trends are lacking. On an individual basis, it is clear that overweight is a result of an imbalance between energy intake and energy expenditure. Recent national estimates indicate that only half of U.S. children participate in vigorous physical activity <sup>67</sup> and less than a quarter eat the recommended 5 or more servings of fruits and vegetables per day, <sup>68</sup> both of which are likely to contribute to the current high rates of overweight. In addition to individual factors such as these, it is essential that we identify the social, economic, and cultural forces contributing to the increasing prevalence of overweight among U.S. children.



NOTE: Data for Mexican American children are not available from 1976-80 due to differences in reporting of race and Hispanic origin. Overweight is defined as body mass index (BMI) at or above the 95th percentile of the 2000 Centers for Disease Control and Prevention BMI-for-age growth charts. BMI is calculated as weight in kilograms divided by the square of height in meters.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey.

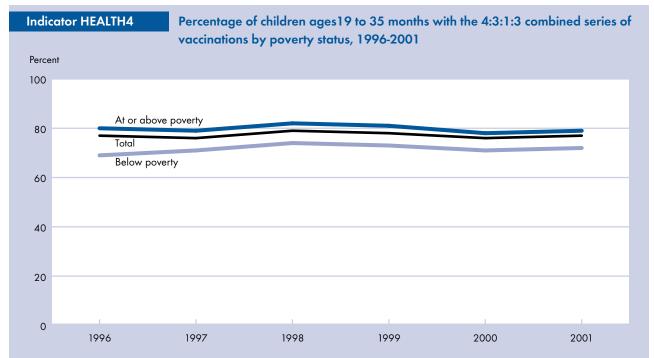
- Since the 1980s, there has been a steady increase in the proportion of children who are overweight. In 1976-1980, only 6 percent of children ages 6 to 18 were overweight. By 1988-1994 this proportion had risen to 11 percent, and continued to climb to 15 percent by 1999-2000.
- Data from 1999-2000 indicate that substantial racial and ethnic disparities exist such that larger percentages of Black, non-Hispanic, and Mexican American children are overweight compared with White, non-Hispanic children.
- Black, non-Hispanic girls and Mexican American boys are at particularly high risk of being

- overweight. In 1999-2000, 24 percent of Black, non-Hispanic girls and 29 percent of Mexican American boys were overweight.
- Among adolescent males ages 12 to 18, virtually no differences existed between ethnic groups in 1988-94. By 1999-2000, there were large ethnic differences: 12 percent of White, non-Hispanic compared with 21 percent of Black, non-Hispanic compared with 30 percent of Mexican American males were overweight.

Bullets contain references to data that can be found in Table HEALTH3 on page 100. Endnotes begin on page 63.

#### **Childhood Immunization**

dequate immunization protects children against several diseases that killed or disabled children in past decades. Rates of childhood immunization are one measure of the extent to which children are protected from serious vaccine-preventable illnesses. The combined immunization series (often referred to as the 4:3:1:3 combined series) rate measures the extent to which children have received the recommended doses of four key vaccinations.



NOTE: Vaccinations included in the combined series are 4 doses of a vaccine containing diphtheria and tetanus toxoids (either diphtheria, tetanus toxoids, and pertussis vaccine [DTP] or diphtheria and tetanus toxoids vaccine [DT]), 3 doses of polio vaccine, 1 dose of a measles-containing vaccine (MCV), and 3 doses of *Haemophilus influenzae* type b (Hib) vaccine. The recommended immunization schedule for children is available at http://www.cdc.gov/nip/recs/child-schedule.pdf.

SOURCE: Centers for Disease Control and Prevention, National Immunization Program and National Center for Health Statistics, National Immunization Survey.

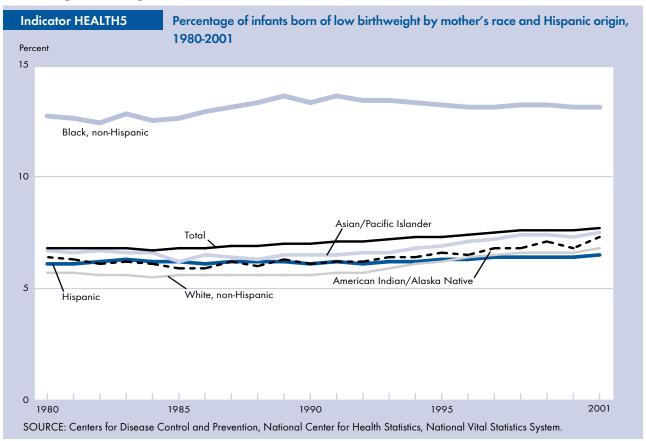
- In 2001, 77 percent of children ages 19 to 35 months had received the recommended combined series of vaccines (often referred to as the 4:3:1:3 combined series).
- Children with family incomes below the poverty level had lower rates of coverage with the combined series than children with family incomes at or above the poverty line—72 percent of children below poverty compared with 79 percent of higher-income children.
- Rates of coverage with the full series of vaccines (4:3:1:3)were higher among White, non-Hispanic children than among Black, non-Hispanic or Hispanic children. Seventy-nine percent of White, non-Hispanic children ages 19 to 35 months received these immunizations compared with 71 percent of Black, non-Hispanic children and 77 percent of Hispanic children.
- Overall and for children living above and below the poverty level, coverage with the combined series remained relatively stable between 1999 and 2001, as did the gap in coverage between children in families living above and below the poverty level.

- Coverage with three or more doses of Hib vaccine among children ages 19 to 35 months remained relatively stable at 93 percent from 1996-2001.
- In addition to the combined series of vaccines, there are other important immunizations such as those for hepatitis B and varicella (chicken pox). Coverage with three or more doses of hepatitis B vaccine among children ages 19 to 35 months increased from 82 percent in 1996 to 89 percent in 2001.
- Coverage with varicella (chicken pox) vaccine among children ages 19 to 35 months continued to increase from 58 percent in 1999 to 76 percent in 2001. Gains in coverage for varicella vaccine were seen among all children regardless of race or ethnicity and poverty level; however, children living at or above the poverty line had higher coverage levels than children living below the poverty level.

Bullets contain references to data that can be found in Table HEALTH4 on page 101.

## Low Birthweight

ow-birthweight infants (infants born weighing less than 2,500 grams, or about 5.5 pounds) are at higher risk of death or long-term illness and disability than are infants of normal birthweight.<sup>69,70</sup> Low birthweight results from an infant's being born preterm (before 37 weeks' gestation) or from being small for his or her gestational age.



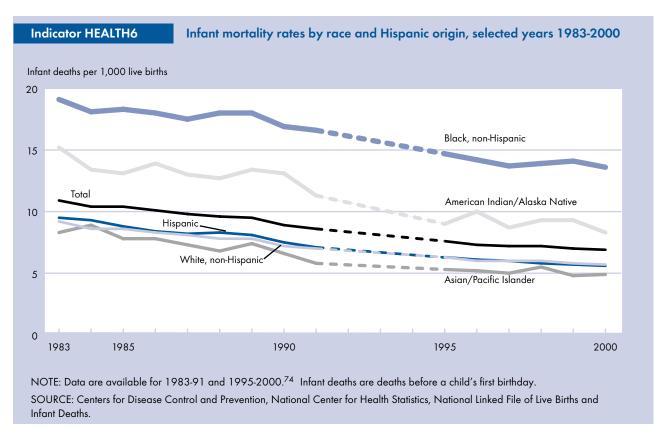
- The percentage of infants born of low birthweight was 7.7 in 2001, up slightly from 7.6 percent recorded in each year from 1998 to 2000. The low-birthweight rate has increased slowly but steadily since 1984, when it was 6.7 percent. The rate for 2001 was the highest since 1972. 10,20
- The low-birthweight rate for Black, non-Hispanic infants is significantly higher than that of any other racial or ethnic group. From 1990 to 2001 the low-birthweight rate among Black, non-Hispanic infants varied between 13.6 and 13.1 percent. Infants of other racial and ethnic groups experienced increases in low-birthweight rates between 1990 and 2001: among White, non-Hispanic infants the rate rose from 5.6 to 6.8, among Hispanic infants it rose from 6.1 to 6.5, among Asians/Pacific Islanders it rose from 6.5 to 7.5, and among American Indians/Alaska Natives it rose from 6.1 to 7.3, the highest it has been in three decades.
- The percentage of low-birthweight births varies widely within Hispanic and Asian/Pacific Islander subgroups. Data for 2001 indicate that among Hispanics, women of Mexican origin had the lowest

- percentage of low-birthweight infants (6.1 percent) and Puerto Ricans the highest (9.3 percent). Among Asian/Pacific Islander subgroups, low-birthweight rates were lowest among women of Chinese origin (5.3 percent) and highest among women of Filipino origin (8.7 percent).
- About 1.4 percent of infants were born with very low birthweight (less than 1,500 grams, or about 3.25 pounds) in each year from 1996 to 2001, up from 1.3 percent in each year from 1989 to 1995 and 1.2 percent in each year from 1981 to 1998.
- one reason for the recent increase in low birthweight over the past several years is that the number of twin, triplet, and higher-order multiple births has increased. 10,70,71 Twins and other multiples are much more likely than singleton infants to be of low birthweight; 55 percent of twins and 94 percent of triplets, compared with 6 percent of singletons, were of low birthweight in 2001. However, even among singletons, there has been an increase in low birthweight. 10

Bullets contain references to data that can be found in Table HEALTH5 on page 102. Endnotes begin on page 63.

## **Infant Mortality**

Infant mortality is defined as the death of an infant before his or her first birthday. The infant mortality rate is an important measure of the well-being of infants, children, and pregnant women because it is associated with a variety of factors, such as maternal health, quality of and access to medical care, socioeconomic conditions, and public health practices.<sup>72</sup> In the United States, about two-thirds of infant deaths occur in the first month after birth and are due mostly to health problems of the infant or the pregnancy, such as preterm delivery or birth defects. About one-third of infant deaths occur after the first month and may be influenced by social or environmental factors, such as exposure to cigarette smoke or inadequate access to health care.<sup>73</sup>



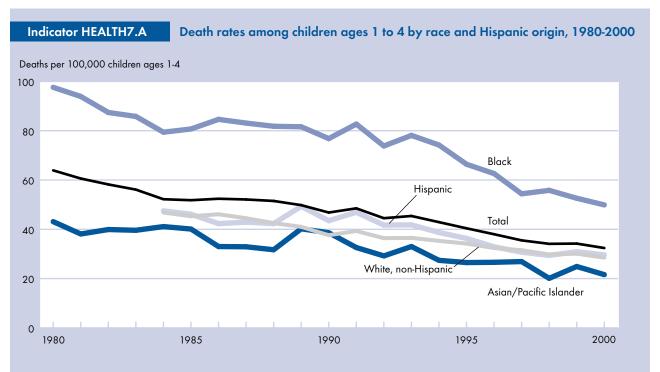
- The 2000 infant mortality rate for the United States was 6.9 deaths per 1,000 live births, a slight drop from the 1999 rate of 7.0.
- From 1999 to 2000, infant mortality decreased for White, non-Hispanic, Black, non-Hispanic, Hispanic, and American Indian/Alaska Native infants; however, the rate increased for Asian/Pacific Islander infants.
- Infant mortality has dropped for all racial and ethnic groups since 1983, but substantial racial and ethnic disparities remain. Black, non-Hispanic and American Indian/Alaska Native infants have consistently had a higher infant mortality rate than that of other racial or ethnic groups. For example, in 2000, the Black, non-Hispanic infant mortality rate was 13.6 infant deaths per 1,000 live births and the American Indian/Alaska Native rate was 8.3, both significantly higher than the rates among White, non-Hispanics (5.7), Hispanics (5.6), or Asians/Pacific Islanders (4.9).

■ Infant mortality rates also vary within racial and ethnic populations. For example, among Hispanics in the United States, the infant mortality rate for 2000 ranged from 4.5 for infants of Cuban and Central/South American origins to a high of 8.2 for Puerto Ricans. Among Asians/Pacific Islanders, infant mortality rates ranged from 3.5 for infants of Chinese origin to 9.1 for Native Hawaiians.

Bullets contain references to data that can be found in Table HEALTH6 on page 103. Endnotes begin on page 63.

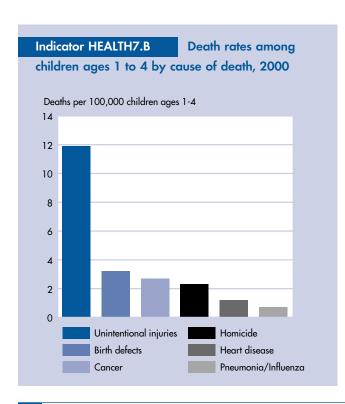
## **Child Mortality**

hild death rates are the most severe measure of ill health in children. These rates have generally declined over the past two decades. Deaths to children ages 1 to 4 are calculated separately from those for children ages 5 to 14 because causes and death rates vary substantially by age.



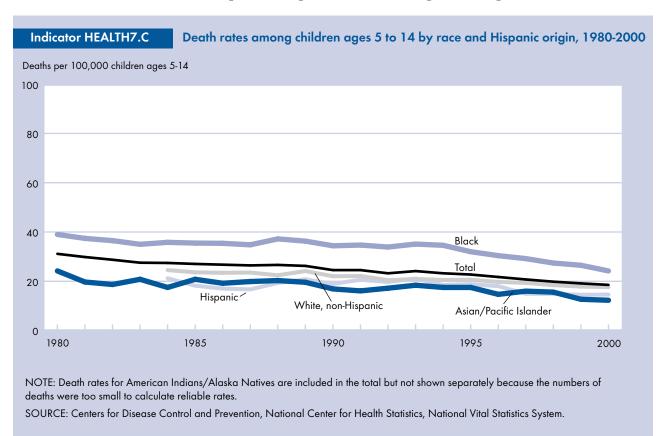
NOTE: Death rates for American Indians/Alaska Natives are included in the total but are not shown separately because the numbers of deaths were too small to calculate reliable rates.

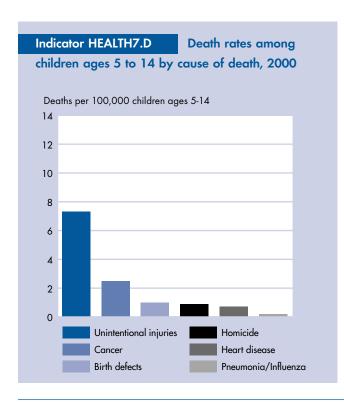
SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.



- In 2000, the death rate for children ages 1 to 4 was 32 per 100,000 children.
- Between 1980 and 2000, the death rate declined by almost half for children ages 1 to 4.
- Among children ages 1 to 4, Black children had the highest death rate in 2000, at 50 per 100,000 children. Asian/Pacific Islander children had the lowest death rate, at 22 per 100,000.
- Among children ages 1 to 4, unintentional injuries were the leading cause of death at 12 per 100,000, followed by birth defects and cancer at 3 per 100,000 children each.
- Motor vehicle traffic crashes are the most common type of injury among children. Use of child restraint systems, including safety seats, booster seats, and seat belts, can greatly reduce the number and severity of injuries to child occupants of motor vehicles. In 2000, 44 percent of child occupants ages 1 to 4 who died in crashes were unrestrained.<sup>75</sup>

eath rates for children ages 5 to 14 are lower than those for children under age 5. The leading cause of death for children at this age remains unintentional injuries, but some other causes of death, such as birth defects, are less common among children ages 5 to 14 than among children ages 1 to 4.



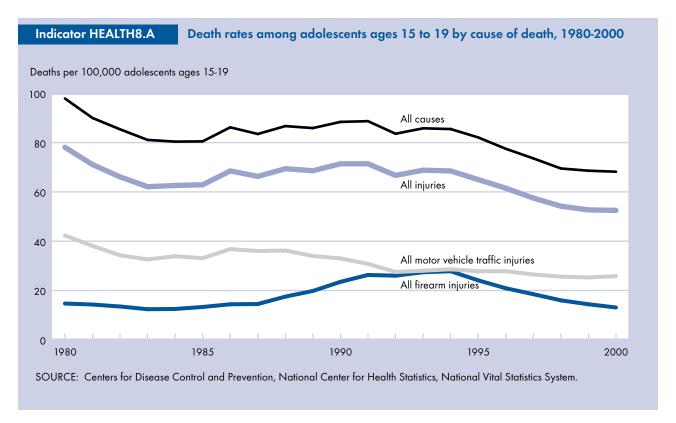


- The death rate in 2000 for children ages 5 to 14 was 18 per 100,000 children.
- Between 1980 and 2000, the death rate declined by approximately 40 percent, from 31 to 18 deaths per 100,000 children ages 5 to 14.
- Similar to mortality patterns for children under the age of 5, among children ages 5 to 14, Black children had the highest death rates in 2000 at 24 deaths per 100,000, and Asians/Pacific Islanders had the lowest death rate at 12 per 100,000.
- Among children ages 5 to 14, unintentional injuries were the leading cause of death, followed by cancer, birth defects, and homicides.
- The majority of unintentional injury deaths among children ages 5 to 14 result from motor vehicle traffic crashes. More than 64 percent of children ages 5 to 14 who died as occupants in motor vehicle crashes in 2000 were not wearing a seatbelt or other restraint.<sup>75</sup>

Bullets contain references to data that can be found in Tables HEALTH7.A and HEALTH7.B on pages 104-105. Endnotes begin on page 63.

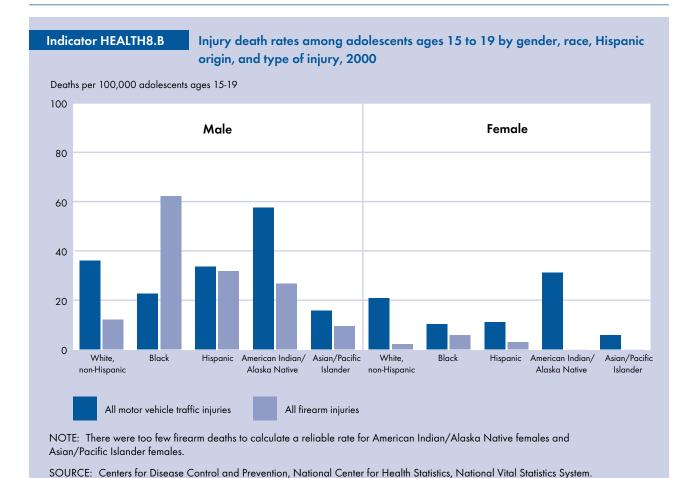
# **Adolescent Mortality**

ompared with younger children, adolescents ages 15 to 19 have much higher mortality rates. Adolescents are much more likely to die from injuries sustained from motor vehicle traffic accidents or firearms. This difference illustrates the importance of looking separately at mortality rates and causes of death among teenagers ages 15 to 19.



- In 2000, the death rate for adolescents ages 15 to 19 was 67 deaths per 100,000. Overall, the rate has declined substantially since 1980, despite a period of increase between 1986 and 1991. Injury, which includes homicide, suicide, and unintentional injuries, continues to account for more than 3 of 4 deaths among adolescents.<sup>20</sup>
- Injuries from motor vehicles and firearms are the primary causes of death among adolescents. In 2000, motor vehicle traffic-related injuries accounted for 25 of the 67 deaths per 100,000 youth ages 15 to 19 (37 percent), while firearm injuries accounted for 13 of the 67 deaths per 100,000 youth ages 15 to 19 (19 percent).
- Motor vehicle injuries were the leading cause of death among adolescents for each year between 1980 and 2000, but the motor vehicle death rate declined by more than one-third during the time period.
- In 1980, motor vehicle traffic-related deaths among adolescents ages 15 to 19 occurred almost three times as often as firearm injuries (intentional and unintentional). By 2000, the rate of motor vehicle traffic-related deaths was less than double that of firearm injuries.

- Motor vehicle traffic-related and firearm death rates have followed different trends since 1980. From 1980 to 1985, both rates declined; in the following years, however, the motor vehicle traffic death rate continued to decline modestly while the firearm death rate increased markedly. During the years 1992 to 1994, the two rates differed only slightly. However, since 1994, the firearm death rate has decreased by more than half while the motor vehicle death rate has decreased only slightly.
- Most of the increase in firearm injury deaths between 1983 and 1993 resulted from an increase in homicides. The firearm homicide rate among youth ages 15 to 19 more than tripled from 5 to 18 per 100,000 between 1983 and 1993. At the same time, the firearm suicide rate rose from 5 to 7 per 100,000. From 1994 to 2000, the firearm homicide rate declined by over one-half and the firearm suicide rate declined by nearly one-third.
- After injuries, additional leading causes of death for adolescents include cancer, heart disease, and birth defects.<sup>20</sup>



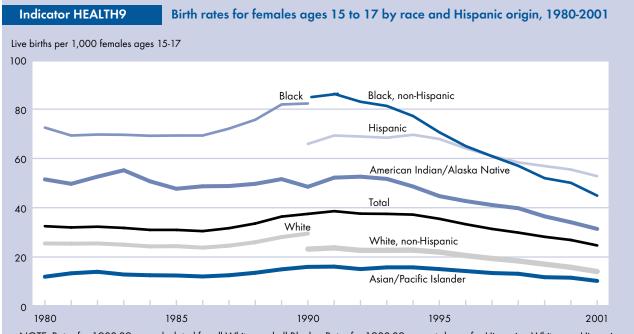
- Motor vehicle and firearm injury deaths are both more common among male than among female adolescents. In 2000, the motor vehicle traffic death rate for males was nearly twice the rate for females, and the firearm death rate among males was eight times that for females.
- Among adolescents in 2000, motor vehicle injuries were the most common cause of death among all females, as well as among White, non-Hispanic, Hispanic, American Indian/Alaska Native, and Asian/Pacific Islander males. Firearm injuries were the most common cause of death among Black males. Black males were more than twice as likely to die from a firearm injury as from a motor vehicle traffic injury.
- Deaths from firearm suicides were more common than deaths from firearm homicides among White, non-Hispanic adolescents, while the reverse is found for Black and Hispanic adolescent males.

■ Deaths from firearm injuries among adolescents declined between 1994 and 2000, particularly among Black and Hispanic males. From 1994 to 2000, the firearm homicide rates for Black and Hispanic adolescent males declined substantially, from 126 to 52 per 100,000 for Black males, and from 49 to 22 per 100,000 for Hispanic males.

Bullets contain references to data that can be found in Table HEALTH8 on pages 106-107. Endnotes begin on page 63.

#### **Adolescent Births**

earing a child during adolescence is often associated with long-term difficulties for the mother and her child. These consequences are often attributable to poverty and the other adverse socioeconomic circumstances that frequently accompany early childbearing.<sup>77</sup> Compared with babies born to older mothers, babies born to adolescent mothers, particularly young adolescent mothers, are at higher risk of low birthweight and infant mortality.<sup>10,13,69</sup> They are more likely to grow up in homes that offer lower levels of emotional support and cognitive stimulation, and they are less likely to earn high school diplomas. For the mothers, giving birth during adolescence is associated with limited educational attainment, which in turn can reduce future employment prospects and earnings potential.<sup>78</sup> The birth rate of adolescents under age 18 is a measure of particular interest because the mothers are still of school age.



NOTE: Rates for 1980-89 are calculated for all Whites and all Blacks. Rates for 1980-89 are not shown for Hispanics; White, non-Hispanics; or Black, non-Hispanics because information on the Hispanic origin of the mother was not reported on the birth certificates of most states.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

- In 2001, the adolescent birth rate was 25 per 1,000 young women ages 15 to 17. There were 145,324 births to these young women in 2001. The 2001 rate was a record low for the Nation. 10,14,15
- The birth rate among adolescents ages 15 to 17 declined more than one-third, from 39 to 25 births per 1,000, between 1991 and 2001. This decline follows a one-fourth increase between 1986 and 1991. The 2001 rate was a record low for young adolescents. 14,15,79
- There are substantial racial and ethnic disparities in birth rates among adolescents ages 15 to 17. In 2001, the birth rate for this age group was 10 per 1,000 for Asians/Pacific Islanders, 14 for White, non-Hispanics, 31 for American Indians/Alaska Natives, 45 for Black, non-Hispanics, and 53 for Hispanics. 14
- The birth rate for Black, non-Hispanic females ages 15 to 17 dropped by nearly half between 1991 and 2001, completely reversing the increase between 1986 and 1991. The birth rate for White, non-Hispanic teens declined by two-fifths during 1991-2001. <sup>15</sup>

- The birth rate for Hispanics in this age group declined more modestly in the 1990s; the rate fell by about one-fourth between 1991 and 2001.<sup>15</sup>
- In 2001, 88 percent of births to females ages 15 to 17 were to unmarried mothers, compared with 62 percent in 1980 (See POP7.B).
- The birth rates for first and second births for ages 15 to 17 declined by one-third and one-half, respectively, between 1990 and 2001.
- The pregnancy rate (the sum of births, abortions, and fetal losses per 1,000 females) declined by nearly one-third for adolescents ages 15 to 17 during 1990 to 1999, reaching a record low of 56 per 1,000 in 1999. Rates for births, abortions, and fetal losses declined for young adolescents in the 1990s. <sup>15,80,81</sup>

Bullets contain references to data that can be found in Table HEALTH9 on page 108 and Table POP7.B on page 82. Endnotes begin on page 63.

#### Indicators Needed

#### Health

National indicators in several key dimensions of health are not yet available because of difficulty in definitions and measurement, particularly using survey research. The following health-related areas have been identified as priorities for indicator development by the Federal Interagency Forum on Child and Family Statistics:

- *Disability*. The Forum is very interested in developing an improved measure of functioning that can be derived from regularly collected data. Such a measure is often referred to as a disability measure. The difficulties inherent in developing such a measure relate to the fact that disability is a complicated, multidimensional concept. Many definitions of disability are currently in use by policy-makers and researchers, but there is little agreement regarding which aspects of functioning should be included or how they should be measured. Disability is best thought of as an umbrella term that includes pathology, impairment, functional limitations, task limitations, and activity limitations as well as characteristics of the environment that can be either a barrier or a support to the activity of the individual. The measurement of functioning and disability in children is critically important, and the Forum is working on determining which aspects of disability should be reported in this volume, and on developing indicators that address these core aspects of health-related well-being.
- Mental health. An international panel of experts in the area of children's mental health has been working with staff at the National Institute of Mental Health, the Center for Mental Health Services in the Substance Abuse and Mental Health Services Administration, and Forum agencies to determine data needs and develop better measures to obtain data on children's mental health. As a result of this collaborative effort, new questions were recently added to the National Center for Health Statistics' annual National Health Interview Survey. Some data have been collected, and plans are being made to evaluate the data and conduct a validity study.

Child abuse and neglect. Also needed are regular, reliable estimates of the incidence of child abuse and neglect that are based on sample surveys rather than administrative records. One estimate of child abuse and neglect was presented as a special feature in America's Children, 1997. Since administrative data are based on cases reported to authorities, it is likely that these data underestimate the magnitude of the problem. Estimates based on sample survey data could potentially provide more accurate information; however, a number of issues still persist, including how to effectively elicit this sensitive information, how to identify the appropriate respondent for the questions, and whether there is a legal obligation for the surveyor to report abuse or neglect.